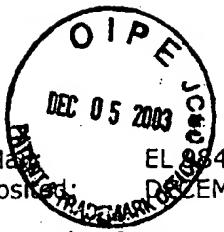


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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Complete if Known	
Application Number	09/929,852
Filing Date	8/14/2001
First Named Inventor	Hildebrand et al.
Group Art Unit	1644
Examiner Name	F.P. VanderVegt
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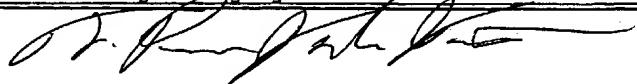
### U. S. PATENT DOCUMENTS

Exam Init.	Cite No. 1	U.S. Patent Number Number	Kind Code <sup>2</sup> (If known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
✓	1	4,683,202		Mullis	7/28/1987	
	7	5,256,541		Pouletty et al.	10/26/1993	
	3	5,270,169		Chang et al.	12/14/1993	
	4	5,292,641		Pouletty	3/8/1994	
	5	5,482,841		Buelow	1/09/1996	
	6	5,710,248		Grose	1/20/1998	
	7	5,750,367		Chan	5/12/1998	
	8	5,776,746		Denney, Jr.	7/7/1998	
	9	5,798,209		Chan	8/25/1998	
	10	6,001,365		Peterson et al.	12/14/1999	
	11	6,255,073		Cai et al.	7/3/2001	

### FOREIGN PATENT DOCUMENTS

Exam Init.	Cite No. 1	Foreign Patent Document Office 3 Number 4	Kind Code <sup>5</sup> (If known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
✓	A	WO 95/11702			5/4/1995		
	B	WO 97/46256			12/11/1997		
	C	WO 98/06749			2/19/1998		
	D	WO 00/23053			4/27/2000		

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RV	AA	"MOLECULAR CLONING A LABORATORY MANUAL", Maniatis et al., Selected Text "RNA -Dependent DNA Polymerase" p.129, "Isolation of mRNA from Mammalian Cells" pp. 191-193, Cold Harbor Spring Laboratory (1982).
	BB	"LARGE SCALE PRODUCTION OF MURINE MONOCLONAL ANTIBODIES USING HOLLOW FIBER BIOREACTORS", Evans et al., BioTechniques, 6(8):763-767 (1988).
	CC	"HIV-1 REVERSE TRANSCRIPTASE IS A TARGET FOR CYTOTOXIC T LYMPHOCYTES IN INFECTED INDIVIDUALS", Walker et al., Science, 240(4848):64-66 (1988).
	DD	"ASSEMBLY OF MHC CLASS I MOLECULES ANALYZED IN VITRO", Townsend et al., Cell, 62(6):285-295 (1990).
	EE	"ALLEL-E-SPECIFIC MOTIFS REVEALED BY SEQUENCING OF SELF-PEPTIDES ELUTED FROM MHC MOLECULES", Falk et al., Nature, 351(6324):290-296, (1991).
	FF	"CHARACTERIZATION OF PEPTIDES BOUND TO THE CLASS I MHC MOLECULE HLA-A2.1 BY MASS SPECTROMETRY", Hunt et al., Science, 255(5049):1261-1263 (1992).
	GG	"PEPTIDE BINDING TO HLA-A2 AND HLA-B27 ISOLATED FROM ESCHERICHIA COLI", Parker et al., The Journal of Biological Chemistry, 267(8):5451-5459 (1992).
	HH	"ENDOGENOUS PEPTIDES OF SOLUBLE MAJOR HISTOCOMPATIBILITY COMPLEX CLASS I MOLECULE, H-2Ld: SEQUENCE MOTIF, QUANTITATIVE BINDING, AND MOLECULAR MODELING OF THE COMPLEX", Corr et al., J. Exp. Med., 176(6):1681-1692 (1992).
	II	"THE SPECIFICITY AND EFFICIENCY OF ENDOGENOUS PEPTIDES IN THE INDUCTION OF HLA CLASS I ALPHA CHAIN REFOLDING", Tanigaki, Eur J. Immunol., 22(8):2177-2180 (1992).
	JJ	"CAN ONE PREDICT ANTIGENIC PEPTIDES FOR MHC CLASS I-RESTRICTED CYTOTOXIC T LYMPHOCYTES USEFUL FOR VACCINATION?", Calin-Laurens et al., Vaccine, 11(9): 974-978 (1993).
	KK	"DIRECT IDENTIFICATION OF AN ENDOGENOUS PEPTIDE RECOGNIZED BY MULTIPLE HLA-A2.1-SPECIFIC CYTOTOXIC T CELLS", Henderson et al., Proc. Natl. Acad. Sci. USA, 90:10275-10279 (1993).
	LL	"CHARACTERIZATION OF ENDOGENOUS PEPTIDES ELUTED FROM THE CLASS I MHC MOLECULE HLA-B7 DETERMINED BY MASS SPECTROMETRY AND COMPUTER MODELING", Huczko et al., J. Immunol., 151(5):2572-2587 (1993).
	MM	"FLOW-CYTOMETRIC DETERMINATION OF PEPTIDE-CLASS I COMPLEX FORMATION IDENTIFICATION OF p53 PEPTIDES THAT BIND TO HLA-A2", Zeh et al., Human Immunology, 39:79-86 (1994).
	NN	"PEPTIDE BINDING TO THE MOST FREQUENT HLA-A CLASS I ALLELES MEASURED BY QUANTITATIVE MOLECULAR BINDING ASSAYS", Sette et al., Molecular Immunology, 31(11): 813-822 (1994).
	OO	"BINDING OF A PEPTIDE ANTIGEN TO MULTIPLE HLA ALLELES ALLOWS DEFINITION OF AN A2-LIKE SUPERTYPE", del Guercio et al., J Immunol., 154(2):685-693 (1995).
	PP	"AN HLA CLASS I PEPTIDE-BINDING ASSAY BASED ON COMPETITION FOR BINDING TO CLASS I MOLECULES ON INTACT HUMAN-B CELLS IDENTIFICATION OF CONSERVED HIV-I POLYMERASE PEPTIDES BINDING TO HLA-A*0301", van der Burg et al., Human Immunology, 44:189-198 (1995).
	QQ	"MEASURING INTERACTIONS OF MHC CLASS I MOLECULES USING SURFACE PLASMON RESONANCE", Khilko et al., J. Immunol. Methods, 183(1):77-94 (1995).
	RR	"PEPTIDE MOTIFS OF HLA-B58, B60, B61, AND B62 MOLECULES", Falk et al., Immunogenetics, 41(2-3):165-168 (1995).
	SS	"AN EMPIRICAL METHOD FOR THE PREDICTION OF T-CELL EPITOPE", Davenport et al., Immunogenetics, 42(5):392-397 (1995).
	TT	"PEPTIDE MOTIFS OF HLA-B38 AND B39 MOLECULES", Falk et al., Immunogenetics, 41(2-3):162-164, (1995).
	UU	"DETAILED MOTIFS FOR PEPTIDE BINDING TO HLA-A*0201 DERIVED FROM LARGE RANDOM SETS OF PEPTIDES USING CELLULAR BINDING ASSAY", Drijfhout et al., Human Immunology, 43(1):1-12, (1995).

3/2/04

**NON PATENT DOCUMENTS**

EXAMINIT.		NON PATENT DOCUMENTS
		DEC 05 2003 OIP SCE
		Includ name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.); date, page(s), volume-issue number(s), publisher, city and/or country where published
RV	VV /	"ANALYSIS OF THE STRUCTURE OF NATURALLY PROCESSED PEPTIDES BOUND BY CLASS I AND CLASS II MAJOR HISTOCOMPATIBILITY COMPLEX MOLECULES", Appella et al., EXS., 73:105-119 (1995).
	WW /	"MAPPING AND RANKING OF POTENTIAL CYTOTOXIC T EPITOPIES IN THE p53 PROTEIN: EFFECT OF MUTATIONS AND POLYMORPHISM ON PEPTIDE BINDING TO PURIFIED AND REFOLDED HLA MOLECULES", Gnjatic et al., Eur. J. Immunol., 25(6):1638-1642 (1995).
	XX /	"SIMPLIFIED HIGH-SENSITIVITY SEQUENCING OF A MAJOR HISTOCOMPATIBILITY COMPLEX CLASS I-ASSOCIATED IMMUNOREACTIVE PEPTIDE USING MATRIX-ASSISTED LASER DESORPTION/IONIZATION MASS SPECTROMETRY", Woods et al., 226(1):15-25 (1995).
	YY /	"PROBING HLA-B7 CONFORMATIONAL SHIFTS INDUCED BY PEPTIDE-BINDING GROOVE MUTATIONS AND BOUND PEPTIDE WITH ANTI-HLA MONOCLONAL ANTIBODIES", Smith et al., 157(6):2470-2478 (1996).
	ZZ ✓	"MASS SPECTROMETRY. IONIZATION METHODS AND INSTRUMENTATION", Chapman, Methods Mol Biol., 61:9-28 (1996).
	aa ✓	"HLA ALLELE SELECTION FOR DESIGNING PEPTIDE VACCINES", Kamalakar et al, Genetic Analysis: Biomolecular Engineering, 13:81-86 (1996).
	ab ✓	"CLASS I-RESTRICTED PRESENTATION OF AN HIV-1 gp41 EPITOPE CONTAINING AN N-LINKED GLYCOSYLATION SITE. IMPLICATIONS FOR THE MECHANISM OF PROCESSING OF VIRAL ENVELOPE PROTEINS", Ferris et al., J Immunol., 156(2):834-840 (1996).
	ac /	"EVALUATION OF HOLLOW FIBER BIOREACTORS AS AN ALTERNATIVE TO MURINE ASCITES PRODUCTION FOR SMALL SCALE MONOClonAL ANTIBODY PRODUCTION", Jackson et al., J. Immunol. Methods, 189(2):217-231 (1996).
	ad	"T-CELL EPITOPE DETERMINATION", Walden, Curr Opin Immunol., 8(1):68-74 (1996).
	ae /	"LARGE-SCALE PRODUCTION OF CLASS I BOUND PEPTIDES: ASSIGNING A SIGNATURE TO HLA-B*1501", Prilliman et al., Immunogenetics, 45(6):379-385 (1997).
	af ✓	"HLA CLASS I BINDING MOTIFS DERIVED FROM RANDOM PEPTIDE LIBRARIES DIFFER AT THE COOH TERMINUS FROM THOSE OF ELUTED PEPTIDES", Davenport et al., J. Exp. Med., 185(2): 367-371 (1997).
	ag /	"STABILITY OF EMPTY AND PEPTIDE-LOADED CLASS II MAJOR HISTOCOMPATIBILITY COMPLEX MOLECULES AT NEUTRAL AND ENDOSOMAL pH: COMPARISON TO CLASS I PROTEINS", Reich et al., Proc. Natl. Acad. Sci. USA, 94:2495-2500 (1997).
	ah /	"HUMAN PEPTIDE TRANSPORTER DEFICIENCY: IMPORTANCE OF HLA-B IN THE PRESENTATION OF TAP-INDEPENDENT EBV ANTIGENS", de la Salle et al., J. Immunol., 158(10):4555-4563 (1997).
	ai ✓	"A NOVEL, HIGHLY EFFICIENT PEPTIDE-HLA CLASS I BINDING ASSAY USING UNFOLDED HEAVY CHAIN MOLECULES: IDENTIFICATION OF HIV-1 DERIVED PEPTIDES THAT BIND TO HLA-A*0201 AND HLA-A*0301", Tan et al., J. Immunol. Methods, 205(2): 201-209 (1997).
	aj /	"LARGE-SCALE PRODUCTION OF CLASS I BOUND PEPTIDES: ASSIGNING A SIGNATURE TO HLA-B*1501", Prilliman et al., Immunogenetics, 45(6):379-385 (1997).
	ak	"SYNTHETIC PEPTIDES BASED ON CHLAMYDIA TRACHOMATIS ANTIGENS IDENTIFY CYTOTOXIC T LYMPHOCYTE RESPONSES IN SUBJECTS FROM A TRACHOMA-ENDEMIC POPULATION", Holland et al., Clin. Exp. Immunol., 107(1):44-49 (1997).
	al	"COMPLEXITY AMONG CONSTITUENTS OF THE HLA-B*1501 PEPTIDE MOTIF", Prilliman et al., Immunogenetics, 48:89-97 (1998).
	am	"A MICROCAPILLARY COLUMN SWITCHING HPLC- ELECTROSPRAY IONIZATION MS SYSTEM FOR THE DIRECT IDENTIFICATION OF PEPTIDES PRESENTED BY MAJOR HISTOCOMPATIBILITY COMPLEX CLASS I MOLECULES", van der Heeft et al., Anal. Chem., 70:3742-3751 (1998).
	an	"SYNTHETIC PEPTIDES OF HUMAN PAPILLOMAVIRUS TYPE 18 E6 HARBORING HLA-A2.1 MOTIF CAN INDUCE PEPTIDE-SPECIFIC CYTOTOXIC T-CELLS FROM PERIPHERAL BLOOD MONONUCLEAR CELLS OF HEALTHY DONORS", Yoon et al., Virus Research, 54:23-29 (1998).
	ao	"MHCPEP, A DATABASE OF MHC-BINDING PEPTIDES: UPDATE 1997", Brusic et al., Nucleic Acids Research, 26(1): 368-371 (1998).

3/2/04

EXAMINIT.		NON PATENT DOCUMENTS
		DEC 05 2003 OIPA SEARCHED INDEXED SERIALIZED FILED
		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title or the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
	ap	"PREDICTION OF MHC CLASS II-BINDING PEPTIDES USING AN EVOLUTIONARY ALGORITHM AND ARTIFICIAL NEURAL NETWORK", Brusic et al., Bioinformatics, 14(2): 121-130 (1998).
	aq	"EFFICIENT GENERATION OF MAJOR HISTOCOMPATIBILITY COMPLEX CLASS I-PEPTIDE COMPLEXES USING SYNTHETIC PEPTIDE LIBRARIES", Stevens et al., The Journal of Biological Chemistry, 273(5):2874-2884 (1998).
	ar	"NEURAL NETWORK-BASED PREDICTION OF CANDIDATE T-CELL EPITOPIES", Honeyman et al., Nat. Biotechnol., 16(10): 966-969 (1998).
	as	"DIRECT IDENTIFICATION OF MAJOR HISTOCOMPATIBILITY COMPLEX CLASS I-BOUND TUMOR-ASSOCIATED PEPTIDE ANTIGENS OF A RENAL CARCINOMA CELL LINE BY A NOVEL MASS SPECTROMETRIC METHOD", Flad et al., Cancer Research, 58(24):5803-5811 (1998).
	at	"STRUCTURE AND FUNCTION OF A MEMBRANE-BOUND MURINE MHC CLASS I MOLECULE", Celia et al., Proc. Natl. Acad. Sci. USA, 96:5634-5639 (1999).
	au	"IDENTIFICATION OF HLA-A3 AND -B7-RESTRICTED CTL RESPONSE TO HEPATITIS C VIRUS IN PATIENTS WITH ACUTE AND CHRONIC HEPATITIS C", Chang et al., J. Immunol., 162(2):1156-1164 (1999).
	av	"HLA-B15 PEPTIDE LIGANDS ARE PREFERENTIALLY ANCHORED AT THEIR C TERMINI", Prilliman et al., J. Immunol., 162(12):7277-7284 (1999).
	aw	"STRUCTURE AND FUNCTION OF A MEMBRANE-BOUND MURINE MHC CLASS I MOLECULE", Proc. Natl. Acad. Sci. USA, 96:5634-5639 (1999).
	ax	"ALPHA-2 DOMAIN POLYMORPHISM AND HLA CLASS I PEPTIDE LOADING", Prilliman et al., Tissue Antigens, 54(5):450-460 (1999).
	ay	"SYFPEITHI: A DATABASE FOR MHC LIGANDS AND PEPTIDE MOTIFS", Rammensee et al., Immunogenetics, 50:213-219 (1999).
	az	"PEPTIDE MOTIF OF THE CLASS I MOLECULE HLA-B*1503", Prilliman et al., Immunogenetics, 49:144-146 (1999).
	ba	"CLAD AGAINST ALL CLADES- CAN VACCINOGENICS BUILD A WORLD HIV VACCINE?", Hollon, The Scientist, 14(18):1 (2000).
	bb	"HUMAN IMMUNOLOGY- 26 <sup>TH</sup> ANNUAL ASHI MEETING ABSTRACTS 2000", 61: Supplement 2 (2000).
	bc	"C-TERMINAL EPITOPE TAGGING FACILITATES COMPARATIVE LIGAND MAPPING FROM MHC CLASS I POSITIVE CELLS", Hickman et al., Human Immunology, 61:1339-1346 (2000).
	bd	"PRODUCTION AND APPLICATION OF INDIVIDUAL HLA PROTEIN", Hildebrand et al., Human Immunology, abstract, vol. 61, no. SUPPL 2, page S81 XP008007733 (2000).
	be	"FIMM, a database of functional molecular immunology", C Schonbach et al., Nucleic Acids Research, vol. 28, no. 1, January 2000 (2000-01), pages 222-224, XP002242984 Oxford, UK figure 1; table 1
	bf	"RAPID DETERMINATION OF HLA B*07 LIGANDS FROM THE WEST NILE VIRUS NY99 GENOME", De Groot et al., Emerging Infectious Diseases, 7(4):706-713 (2001).
	bg	"EXAMINATION OF POSSIBLE STRUCTURAL CONSTRAINTS OF MHC-BINDING PEPTIDES BY ASSESSMENT OF THEIR NATIVE STRUCTURE WITHIN THEIR SOURCE PROTEINS", Schueler-Furman et al., PROTEINS: Structure, Function, and Genetics, 45:47-54 (2001).
	bh	"USE OF FLUORESCENCE POLARIZATION TO MONITOR MHC-PEPTIDE INTERACTIONS IN SOLUTION", Dedier et al., Journal of Immunological Methods, 255:57-66 (2001).
	bi	"PEPTIDE/MHC MONOMERS CAN BE INSERTED INTO ARTIFICIAL LIPID BI-LAYERS AS ARTIFICIAL ANTIGEN PRESENTATION CONSTRUCTS", Jiang et al., Section of Transplantation Immunology, BMT Department, M.D. Anderson Cancer Center, Houston, Texas, Abstract # 2126 (2001).
	bj	"NEURAL NETWORK METHOD FOR PREDICTING PEPTIDES THAT BIND MAJOR HISTOCOMPATIBILITY COMPLEX MOLECULES", Gulukota et al., Methods Mol. Biol., 156:201-209 (2001).
Non Patent Documents: <sup>1</sup> Unique citation designation number / <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.		
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